

PLASMODIUM SP. CHITINASE

ABSTRACT OF THE DISCLOSURE

The present invention is directed to isolated
5 nucleic acid molecules encoding Plasmodium sp.
chitinases. Expression vectors and host cells comprising
the nucleic acid molecules are also provided, as well as
methods for increasing or decreasing the expression of
the chitinase in host cells. The invention further
10 provides methods of screening a substance for the ability
of the substance to modify chitinase function, and a
method for isolating other chitinase molecules. DNA
oligomers capable of hybridizing to the nucleic acid
molecule encoding the chitinase are provided, which can
15 be used to detect chitinase in a sample. An isolated
Plasmodium sp. chitinase is also provided. Antibodies
specific for the chitinase, and fragments thereof, are
provided, as are compositions comprising the chitinase
and a compatible carrier. The subject invention further
20 provides methods of preventing infection of mosquitoes by
Plasmodium sp. and methods of preventing transmission of
malaria.